Response to Office Action dtd. March 3, 2003

AMENDMENTS TO THE CLAIMS

Please amend Claims 1, 17, 18, 21 and 24, as reflected in the following set of claims, which supercedes all previous sets of claims in this application.

SUB BIT

1. (amended) A computer-implemented method for aggregating and expressing geographically-linked data provided by a plurality of observers, comprising the steps of:

a) providing an interactive map capable of receiving geographical location and associated data over the Internet from assid plurality of observers;

b) receiving a first geographical location and first associated data from a first observer;

- c) storing said geographical location and said first associated data in a database as data records according to said geographical location;
 - d) receiving a second location and second associated data from a second observer;
 - e) repeating steps c) and d) with said second location and second associated data;
 - f) receiving a spatial query from a user specifying at least one location on said interactive map; and
 - g) providing the data records associated with the user-specified at least one location:

whereby data records received from the plurality of observers may be stored according to geographical location and retrieved for study according to a geographical-based query.

- 2. (original) The method of claim 1 further comprising the step of translating said first location to one or more map coordinate points; and wherein said step of storing said first location further comprises storing said map coordinate points in said database.
- 3. (original) The method of claim 1 further comprising the step of translating said first location to a line; and wherein said step of storing said first location further comprises storing said line in said database.

Response to Office Action dtd. March 3, 2003

- 4. (original) The method of claim 1 further comprising the step of translating said first location to a polygon; and wherein said step of storing said first location further comprises storing said polygon in said database.
- 5. (original) The method of claim 1 wherein said second location overlaps said first location.
- 6. (original) The method of claim 1 further comprising the steps of:
 - i) receiving a user-specified link factor;
 - j) selecting data records from said database using said first link factor;
 - k) creating a map overlay by linking said selected records; and
 - 1) overlaying said map overlay on said interactive map.
- 7. (original) The method of claim 1 further comprising the steps of providing a plurality of references to each of said locations in said interactive map, any one of said plurality of references to be used as a location point specifier.
- 8. (original) The method of chaim 7 wherein the step of providing a plurality of references further comprises displaying a list of available references for a user-specified location on the interactive map.
- 9. (original) The method of claim 1 wherein said interactive map has a plurality of layers and said at least one location is specified according to layer.
- 10. (original) The method of claim 7 wherein said plurality of references includes longitude and latitude.
- 11. (original) The method of claim 7 wherein said plurality of references includes a place name.

Appl. Ser. No.: 09/702,407

Response to Office Action dtd. March 3, 2003

Al

- (original) The method of claim 7 wherein said plurality of references includes an observer-specified name.
- 13. (original) The method of claim 7 wherein said plurality of references includes geographical association reference.
- 14. (original) The method of claim 6 wherein said link factor is a selected entry type in said data records.
- 15. (original) The method of claim 6 wherein said link factor is a project name included in said data records.
- 16. (original) The method of claim 6 further comprising the steps of:
 - m) receiving at least one additional user-specified link factor;
 - n) selecting additional data records from said database using said at least one additional link factor.
 - o) creating a second map overlay by linking said additional data records; and
 - p) overlaying said second map overlay on said interactive map.
- 17. (amended) A computer-implemented method for accumulating geographically-linked data in order to respond to geographical based queries, comprising the steps of:
 - a) providing an interactive map;
 - b) receiving a plurality of locations and a plurality of associated data from an observer;
 - c) translating said plurality of locations to one or more map coordinate points;
 - d) storing said one or more map coordinate points and said plurality of associated data in a <u>spatially-linked</u> database as data records;
 - eg) receiving at least one geographical based query from at least one user, said at least one user specifying at least one location point on said interactive map; and

Appl. Ser. No.: 09/702,407

Response to Office Action dtd. March 3, 2003

Al

 \underline{fh}) providing the data records associated with the user-specified at least one location.

- 18. (amended) A computer-implemented method for conducting ornithology studies, comprising the steps of:
 - a) providing a web-based interactive map capable of receiving as input locations and associated data from a plurality of observers;
 - b) creating a plurality of bird observation sites in a spatially-linked database in response to input from said plurality of observers;
 - c) accepting locations and associated data from said plurality of observers;
 - d) translating said locations to map coordinate points;
 - e) relating said associated data to bird observation sites among the created bird observation sites using said map coordinate points; and,
 - f) storing said associated data in athe database at respective related bird observation sites.
- 19. (Original) The method of claim 18 further comprising the steps of:
 - g) accepting a spatial query from a user, said spatial query including at least one bird observation site;
 - h) accessing said database for data records associated with said at least one bird observation site; and
 - i) creating a report from data records found in step h).
- 20. (Original) The method of claim 19 wherein said spatial query further comprises a bird species.
- 21. (amended) A computer-implemented method for collecting data <u>associated with from at</u>

 least one of a plurality of points of interest, the location of the one-point being initially
 undetermined, the collected data being indicative of an event occurring at the-one-point of
 interest, said method comprising the steps of

Response to Office Action dtd. March 3, 2003



a) providing at least one geographically referenced map for receiving a mark indicative of the relative position of athe one point of interest, the at least one map including at least one reference points whose geographic coordinates are known;

- b) processing the relative position of the one-point of interest with respect to the at least one reference point to provide geographic coordinates of the one-point of interest; and
- c) associating the geographic coordinates with the data in a geographically-linked database related to the one point of interest.
- 22. (original) A computer-implemented method for facilitating the collection and inputting of data to a centrally disposed database by a plurality of data gatherers by use of a network which is accessible from points within a geographic area, the data being indicative of an event occurring at one of a plurality of points of interest within the geographic area, the location of the plurality of points of interest being initially undetermined, said method comprising the steps of:
 - a) downloading over the network upon request of at least one of the plurality of data gatherers at least one geographically referenced map to the one data gatherer, the one geographically referenced map including at least one reference point whose geographic coordinates are known and is adapted to receive a mark inputted by the data gatherer and indicative of the relative position of the one point of interest;
 - b) receiving at the centrally disposed data base the mark and the data related to the mark; and
 - c) processing the relative position of the one point of interest with respect to the one reference point to provide the geographic coordinates of the one point of interest.
- 23. (original) The computer-implemented method of claim 22, wherein the database includes a plurality of storage locations that are respectively addressable by the coordinates of corresponding points of interest, and there is a further included the step of inputting the data related to the one point of interest to the storage location addressed by the coordinates of the data related to the corresponding point of interest.

Atty. Docket No.: 10845-131 Appl. Ser. No.: 09/702,407

Response to Office Action dtd. March 3, 2003

Al

- 4. (amended) The method of constructing and inputting data into a database, which is connected to a network and is accessible from a plurality of points of interest within a geographic area, the location of the plurality of points of interest being initially undetermined, the data being indicative of an event occurring at one of a plurality of points of interest within the geographic area, said method comprising the steps of:
 - a) constructing the <u>a</u> database to have a plurality of storage locations, each of said storage locations being dedicated to receive data from relative to a corresponding one point of interest and addressable in accordance with the geographic coordinates of the corresponding one point of interest;
 - b) providing at least one geographically referenced map for receiving a mark indicative of the relative position of the one-point of interest, the <u>at least</u> one map including at least one reference point whose geographic coordinates are known;
 - c) processing the relative position of the one-point of interest with respect to the <u>at</u> least one reference point to provide geographic coordinates of the one-point of interest;
 - d) addressing one of the storage locations according to the geographic coordinates of the one-point of interest; and
 - e) inputting data relative to the one-point of interest into the addressed storage location.